

MULTICOMPONENT ASSEMBLIES HAVING ENHANCED BINDING PROPERTIES FOR DIAGNOSIS AND THERAPY

ABSTRACT

An organized mobile multicomponent conjugate (OMMC) and method of using to enhance binding of weakly binding compounds to a target. A lamellar structure containing at least two binding compounds is assembled under conditions in which the binding compounds self-regulate in or on the lamellar structure, forming a cooperative ensemble that is capable of binding with enhanced affinity to a complementary affinity site on a target. Each binding compound is bound to the lamellar surface, and may be connected by a linker. The OMMC may contain an effector molecule, such as a diagnostic or therapeutic agent, for administration to a patient who is then diagnosed or treated using the effector molecule.